Agenda Item #: 3-C-11

Agenda Item is over 50 pages; may be viewed in the Minutes Department

# PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS AGENDA ITEM SUMMARY

Meeting Date:	March 14, 2017	[X] Consent [ ] Workshop	[ ] Regular [ ] Public Hearing
Department: Submitted By: Submitted For:	Engineering & Engineering & Roadway Produ	Public Works	

#### **EXECUTIVE BRIEF**

Motion and Title: Staff recommends motion to approve: an annual guardrail contract, Project No. 2017052, with Southeast Highway Guardrail and Attenuators, LLC (Southeast), in an amount not to exceed the total value of \$300,000 for task orders.

**SUMMARY:** Approval of this contract will facilitate the furnishing and installation of guardrail, furnishing of guardrail products, removal and disposal of "old" guardrail, and/or resetting of existing guardrail. The Palm Beach County Small Business Enterprise (SBE) goal for all contracts is 15%. The SBE participation committed for the project by Southeast, the sole responsive, responsible bidder is 0%. This contract is for 12 months, with the possibility of an extension for up to a total of 36 months. <u>Countywide</u> (MJ)

**Background and Justification:** Bids for the project were received by the Engineering Department on December 20, 2016. Southeast, the sole bidder was found to be responsive and responsible. The above contract amount is based on the estimated amount to be expended for guardrail maintenance and replacement throughout Palm Beach County over a 12 month period. Southeast is a Palm Beach County company.

# Attachments:

- 1. Contract (3)
- 2. Contract Pages C-1 and C-2
- 3. SBE Compliance Review
- 4. Bid Tabulation

() (۲ Recommended by: <u>م</u>	S.T. Well	2/13/17
	Department Director	Date
Approved By:	mare Jakana	2/22/12

Assistant County Administrator

Date

## II. FISCAL IMPACT ANALYSIS

#### A. Five Year Summary of Fiscal Impact:

Fiscal Years	2017	2018	2019	2020	2021
Capital Expenditures	\$300,000				<u> </u>
Operating Costs	-0-	-0-	-0-	0	<u> </u>
External Revenues	-0-	-0-	-0-		<u>-0-</u>
<b>Program Income (County)</b>	-0-	-0-	-0-		
In-Kind Match (County)	-0-	-0-	<u> </u>		
NET FISCAL IMPACT	<u>\$300,000</u>	-0-			
<b># ADDITIONAL FTE</b>					
<b>POSITIONS (Cumulative)</b>					

No

Is Item Included in Current Budget? Yes

**Budget Account No:** Fund Dept Unit Object

**Recommended Sources of Funds/Summary of Fiscal Impact:** 

User Dept/Division	Bu	dget Amounts
Engineering	\$	250,000
Parks & Recreation	\$	25,000
Airports	\$	10,000
Fire Rescue	\$	10,000
Water Utilities	\$	5,000
Total	\$	300,000

Allocations to the various departments are a not to exceed amount and can be expended from various lines for various projects where budget is available. Work will be performed on a task order basis. \*\*Total fiscal impact will not exceed \$300,000.

1 C. Departmental Fiscal Review:

## III. <u>REVIEW COMMENTS</u>

A. OFMB Fiscal and/or Contract Dev. and Control Comments:

ASI. **OFMB** Ex 2/13 2/1

B. **Approved** as to Form and Legal Sufficiency:

122/17 S Assistant County Attorney

C. Other Department Review:

Control

This summary is not to be used as a basis for payment.

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**Department Director** 

ATTACHMENT 2 PAGE 1 OF 2

# ANNUAL CONTRACT

STATE OF FLORIDA

) SS

)

## COUNTY OF PALM BEACH )

This Contract, made this \_\_\_\_\_ day of \_\_\_\_\_\_, A.D. 20\_\_\_, by and between PALM BEACH COUNTY, a Political Subdivision of the State of Florida, (hereinafter "County"), and \_\_\_\_\_\_, Florida, and their heirs, executors, administrators and assigns, (hereinafter "Contractor"):

WITNESSETH: The Contractor agrees with the County, for the consideration herein mentioned at their own proper cost and expense to do all the work and furnish all necessary labor, materials, equipment, machinery, tools, apparatus, services, state workmen's compensation and unemployment compensation taxes incurred in the performance of the contract, for the:

IN THE AMOUNTS specified in work orders which may be issued by the County. The County is not required to issue any work orders hereunder. The total value of work orders issued under this Contract shall not exceed Three Hundred Thousand Dollars (\$300,000.00), except as may be increased according to Section 9-11 of the Contract Specifications.

The Contractor further agrees for the consideration herein mentioned to commence the work with adequate forces and equipment within five (5) working days of the work order being issued for a specific project. After commencement of the work, the work order shall be properly dispatched toward completion, to the satisfaction of the Engineer, and shall be fully complete within the time limit specified in the work order. Should the time limit for completion of the work order exceed the expiration date of the contract, the work order work will continue to completion and the Contractor shall ensure that Bonding and Insurance coverage do not expire until all work orders issued prior to the expiration of this Contract are complete and accepted. It is understood and agreed that the time limit for completion of said work is the essence of the contract and should the Contractor fail to complete the work within the time limit, it is agreed that for such calendar day that any work provided for in these Contract Documents shall remain incomplete after the time limit has expired, including any official extension of the time limit; the sum per day given in the contained schedules shall be deducted from monies due the Contractor, not as a penalty, but as liquidated damages and added expense for supervision.

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ATTACHMENT 2 PAGE 2 OF 2

The Contractor shall take into account all contingent work which has to be done by other parties arising from any cause whatsoever, and shall not plead his want of knowledge of such contingent work as an excuse for delay in his work, or for its non-performance.

IN WITNESS WHEREOF, the parties have caused this Contract to be executed and sealed the day and year first written above.

ATTEST:

(witness name printed)

SHARON R. BOCK, PALM BEACH COUNTY, FLORIDA, a Clerk & Comptroller Political Subdivision of the State of Florida By: \_ By: Deputy Clerk Paulette Burdick, APPROVED AS TO FORM APPROVED AS TO TERMS AND LEGAL SUFFICIENCY AND CONDITIONS (witness signature) (Corporate Name) а (witness name printed) (insert state of incorporation) By\_\_\_ (witness signature)

# BOARD OF COUNTY COMMISSIONERS

Mayor

corporation

(signature)

(print signatory's name)

Its\_

(print title)

(date)

(Corporate Seal)

C-2

ATTACHMENT 3



Office of Small Business Assistance 50 South Military Trail, Suite 202 West Palm Beach, FL 33415 (561) 616-6840 Fax: (561) 616-6850 www.pbcgov.com/osba



Palm Beach County Board of County Commissioners

Paulette Burdick, Mayor

Melissa McKinlay, Vice Mayor

Hal R. Valeche

Dave Kerner

Steven L. Abrams

Mary Lou Berger

Mack Bernard

#### **County Administrator**

Verdenia C. Baker

"An Equal Opportunity Affirmative Action Employer" DATE:January 11, 2017TO:Holly B. Knight, P.E., Contracts Section Manager<br/>Roadway Production DivisionTHROUGH:Allen Gray, Manager<br/>Office of Small Business AssistanceFROM:Angela D. Smith, Small Business Development Specialist II

Office of Small Business Assistance

# SUBJECT: Compliance Review on Project No. 2017052 Annual Guardrail Contract

The following is a Compliance Review of SBE participation on the abovementioned project. The Bid Opening date was December 20, 2016. SBE participation is calculated on the amount less contingency.

Sole Bidder:

Bid Amount: Amount Less Contingency: Goal: Goal Achieved: Southeast Highway Guardrail & Attenuators, LLC \$568,709.25 \$568,709.25 15% Overall 0 %

SBE Participation:

0%

#### **EVALUATION:**

The sole bidder, **Southeast Highway Guardrail & Attenuators, LLC,** has not met the SBE Goal for this project.

	BID PROPOSAL ANNUAL GUARDRAIL CONTRACT PBC PROJECT #2017052			Constant of the second	ENGINEER S ESTIMATE	Southeast Guardrail & Att	
ITEM #	ITEM DESCRIPTION	QTY	UNITS	1. 1000			TOTAL
1	Emergency Response, Less Than 6 Hours	5	EA	5		UNIT PRICE \$ 500.00	TOTAL \$ 2,500.00
2	Emergency Response, 6 Hours to 24 Hours	10	EA	\$			\$ 2,500.00
3	Emergency Response, 24 Hours to 72 Hours	12	EA	\$			
4	Removal & Disposal of "Old" GuardRail	9,000	LF	\$			\$ 18,000.00
 6	Removal & Disposal "Old" GuardRail, w/Concrete PostS Removal & Disposal of Anchorage Assemblies	20	LF	\$			\$ 20.00
7	Removal & Disposal of Anchorage Assemblies	75	EA	\$		\$ 10.00	\$ 750.00
8	Remove and Deliver Used GuardRail to Road & Bridge Warehouse	350 75				\$ 0.25	\$ 87.50
9	Installation of Used GuardRail	25	LF	\$		\$ 0.50	\$ 37.50
10	Reset GuardRail	12,500	LF	\$			\$ 400.00 \$ 50,000.00
11	Misc. Asphalt	1	TN	\$		\$ 600.00	\$ 600.00
12	Surcharge to Reset GuardRail Post on Base Plate	5	EA	\$			\$ 5.00
<u>13</u> 14	Raise and Reset Existing GuardRail (Posts and Panels)	25	LF	\$		\$ 13.00	\$ 325.00
14 900.00	Reset Anchorage Assembly, Type SKT 350 ******* FURNISH AND INSTALL, COMPLETE ITEMS 15-105 (SEE NO	2 )TE 5) ****	EA	\$	378.00	\$ 1,500.00	\$ 3,000.00
15	Anchorage Assembly, Type II, Cable Anchor Option	2	EA	\$	1 000 00	0 4 500 00	
16	Anchorage Assembly, Type MELT	7	EA	\$			\$ 3,000.00
17	Anchorage Assembly, Type LET	8	EA	\$			\$ 7.00 \$ 8.00
18	Anchorage Assembly, Type SKT 350	3	EA	\$			\$ 10,800.00
<u>19</u> 20	Anchorage Assembly, Type SRT-350	5	EA	\$			\$ 18,000.00
20	Anchor Panel, for Type II Anchor Panel, for Type MELT	8	EA	\$		\$ 100.00	\$ 800.00
22	Anchor Panel, for Type LET	4	EA	\$			\$ 4.00
23	Anchor Panel, for Type SKT 350	2	EA EA	\$			\$ 2.00
24	Type MELT Buffered End (w/Diaphragms)	4	EA EA	\$			\$ 3,600.00
25	Cable w/Hardware, for Type MELT	3	EA	- <del>3</del> \$	216.00		\$ 4.00 \$ 3.00
26	Type SKT 350 Extruder Head	8	EA	\$			\$ 3.00 \$ 12,000.00
<u>27</u> 28	Short Post in Sleeve for Types SKT 350 and MELT	15	EA	\$	216.00		\$ 1,500.00
28	Block, Concrete, Special, AT Bridge	2	EA	\$	1.08		\$ 2.00
30	Block, Offset Utility (Double BlockinG) Block, Wood, w/Hardware	5	EA	\$	54.00	\$ 1.00	\$ 5.00
31	Block, Recycled Plastic, w/GuardRail Bolt	200	EA	\$	16.20		\$ 3,000.00
32	End Section, Buffer	3	EA EA	\$	16.20		\$ 1,750.00
33	End Section, Flared	10	EA	\$	216.00 108.00	-	\$ 1,200.00
34	End Section, Parallel	10	EA	\$	40.00	and the second se	\$ 200.00 \$ 200.00
35	End Section, CRT	10	EA	\$	40.00		\$ 200.00 \$ 200.00
<u>36</u> 37	End Section, Rounded End Shoe, Special (Bridge Attachment Piece)	40	EA	\$	37.80		\$ 1,000.00
38	Drill Holes for End Shoe Attachment	4	EA	\$	108.00		\$ 60.00
	GuardRail, Steel Beam, Double Face	100 25	EA LF		16.20		\$ 50.00
40	GuardRail, Steel Beam, Straight Panel Only (No Post or Hardware)	2,250		\$	16.20 19.44		\$ 100.00
	GuardRail, Steel Beam, Shop Bent Panel Only (No Post or Hardware)	200	LF	\$	21.60	and the second se	\$ 40,500.00 \$ 1,800.00
<u>42</u> 43	GuardRail, Steel Beam, Straight, Jobs Up Through 37' 6"	1,250	LF	\$			\$ 23,750.00
43	GuardRail, Steel Beam, Straight, Jobs of 37' 7" - 62' 6" GuardRail, Steel Beam, Straight, Jobs of 62' 7" - 100' 0"	800	LF	\$	22.68		\$ 16,000.00
45	GuardRail, Steel Beam, Straight, Jobs of 62 7" - 100 0" GuardRail, Steel Beam, Straight, Jobs of 100' 1" - 500' 0"	550	LF	\$	21.60	\$ 20.00	\$ 11,000.00
	GuardRail, Steel Beam, Straight, Jobs Over 500'	650	LF	\$	21.60	\$ 20.00	\$ 13,000.00
47	GuardRail, Steel Beam, Straight, w/9' Posts	2,000	<u>LF</u>	<u>\$</u> \$	18.36	\$ 20.00	
48	GuardRail, Steel Beam, Shop Bent, Jobs Up Through 37' 6"	350		\$	22.68 24.84		\$ 25.00
49	GuardRail, Steel Beam, Shop Bent, Jobs of 37' 7" - 62' 6"	150	LF	\$			\$ 4,550.00 \$ 1,200.00
50	GuardRail, Steel Beam, Shop Bent, Jobs of 62' 7" - 100' 0"	125	LF	\$	12.96		\$ 1,200.00 \$ 500.00
51 52	GuardRail, Steel Beam, Shop Bent, Jobs of 100' 1" - 500' 0" GuardRail, Steel Beam, Shop Bent, w/9' PostS	113	LF	\$	10.80		\$ 452.00
53	5 Degree Radius Shop Bent GuardRail (6-1/4')	25	LF	\$	10.80		\$ 75.00
54	Transition Panel, QUAD Beam to W Beam, Narrow	31	LF	\$	20.52		\$ 93.00
55	Transition Panel, QUAD Beam to W Beam, Medium	2	EA	\$	10.80		\$ 50.00
56	Transition Panel, QUAD Beam to W Beam, Wide	$\frac{2}{2}$	EA EA	\$	10.80		50.00
57	Post, GuardRail, Steel, Standard	70	EA	\$	and the second se	\$ 25.00 \$ 150.00	50.00 10,500.00
	Post, GuardRail, Steel, 9'	3	EA	\$		\$ 35.00	
59 60	Post, GuardRail, Wood (Treated Timber), Standard Post, GuardRail, Encased, Steel	18	EA	\$	108.00	\$ 100.00	
61	Post, GuardRail, Encased, Wood	3	EA	\$		\$ 150.00	450.00
62	Post, GuardRail, Steel, Special, w/Plate	3	EA EA	\$		\$ 1.00	
63	Post, GuardRail, CRT	15	EA EA	\$ \$		<u>\$ 150.00</u>	
64	Rail, Safety Pipe, Special	225		\$		\$ 200.00 \$ \$ 12.00 \$	
65	Round-Off Top of Wooden GuardRail Post and Block (All Sides)	25	EA	\$		\$ 0.25 S	
66 67	Controlled Release Terminal, 8' Radius	2	EA	\$	the second se	\$ 3,000.00	
68	Controlled Release Terminal, 16' Radius Controlled Release Terminal, 24' Radius	1	EA	\$	1,944.00	\$ 1,000.00	
69	Controlled Release Terminal, 24 Radius	2	EA	\$		\$ 800.00 \$	6 1,600.00
	THRIE Beam	2	EA	\$	540.00	\$ 600.00	
70	THRIE Beam Terminal Connector	3	EA	e e	046.00	e	
71	THRIE Beam Bridge Connector Complete (Detail J)	8	EA	\$		\$ 10.00 \$ \$ 3,000.00 \$	
72	12" x 12" x 1/4" Back Up Plate	2	EA	\$		\$ 3,000.00 \$ 1.00	
	8" x 8" x 5/8" Filler Plate	5	EA	\$		\$ 1.00 \$	
75	21" x 21" x 5/8" Back Up Plate THRIE Beam, Straight Panel Complete (w/ Post, Block & Hardware)	5	EA	\$	1.08	\$ 1.00 \$	
76	THRIE Beam, Straight Panel Complete (w/ Post, Block & Hardware) THRIE Beam, Shop Bent Panel Complete (w/ Post, Block & Hardware)	20	LF	\$	23.76	\$ 16.00 \$	
11	HRIE Beam, Straight Panel (Panel Only)	85 125		\$		\$ 28.00 \$	
78	THRIE Beam, Shop Bent Panel (Panel Only)	5		\$ \$		\$ 12.00 \$	
79	5-3" Transition Panel THRIE Beam to W-Beam	6	EA	\$ \$		\$ 12.00 \$ \$ 150.00 \$	
80	HRIE Beam Offset Block	4	EA	\$		\$ 150.00 \$ \$ 21.00 \$	
81 0	G-R-E-A-T System - Additional Parts		altressour		10.20	<u>+ 21.00 3</u>	84.00
81 0	3-R-E-A-T System Fender Panel 3-R-E-A-T System Type 51 HEX-FOAM Cartridge	2	EA	\$	27.00	\$ 1,100.00 \$	2,200.00
83 0	3-R-E-A-T System Type 51 HEX-FOAM Cartridge 3-R-E-A-T System Diaphragm 24"	2	EA	\$	1,080.00	\$ 1,100.00 \$	
84 0	G-R-E-A-T System Diaphragm 30"	2	EA	\$		\$ 100.00 \$	200.00
			EA 🛛	\$	108.00	\$ 100.00 \$	200.00
85 (	G-R-E-A-T System Diaphragm 36"	2	EA	\$	the second se	\$ 100.00 \$	

N:\ROADWAY\PRO\2017\2017052 - Annual Guardrail\3\_Award Spec Forms\1\_Bid Tabulations\Bid Tabs\_SOUTHEAST.xlsx

1 of 4

ITEM DESCRIPTION           G-R-E-A-T System Nose Assembly           G-R-E-A-T System Concrete Backup Wall Assembly           G-R-E-A-T System Concrete Backup Wall Assembly           G-R-E-A-T System Tension Strut Backup Wall Assembly           G-R-E-A-T System Tension Strut Backup Wall Assembly           G-R-E-A-T System Concrete Barrier Wall Backup Assembly           G-R-E-A-T System Concrete Barrier Wall Backup Assembly           G-R-E-A-T System Concrete Barrier Wall Backup Assembly           QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes           QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes           QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)           QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"           QUADGUARD Energy Absorbing Sys., Nose Assembly. 24"/30"/36"           QUADGUARD Energy Absorbing Sys., Diaphragm 24"           QUADGUARD Energy Absorbing Sys., Fender Panel Assembly. 24"/3           QUADGUARD Energy Absorbing Sys., Fender Panel Assembly. 24"/3           QUADGUARD Energy Absorbing Sys., Fender Panel Assembly. 24"/3           QUADGUARD ELITE Fender Pane	Cludes         2           t Parts         1           2         1           2         1           4"         2           of Damaged QU/         1           2         2           0"/36"         2           2         1           2         1           2         1           2         1	EA EA EA EA EA EA		NIT PRICE 1,080.00 10.80 10.80 10.80 10.80 10.80 10.80 10.80 1,080.00 1,080.	\$ 1.00 \$ 13,500.00 \$ 2,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	TOTAL           \$ 3,000.00           \$ 2.00           \$ 2.00           \$ 2.00           \$ 2.00           \$ 2.00           \$ 2.00           \$ 2.00           \$ 2.00           \$ 3,000.00           \$ 13,500.00           \$ 5,000.00           \$ 3,000.00           \$ 1,500.00           \$ 2.00           \$ 1,600.00           \$ 1,800.00           \$ 1,800.00           \$ 2,500.00
<ul> <li>G-R-E-A-T System Concrete Backup Wall Assembly</li> <li>G-R-E-A-T System Deflector Assembly for Bidirectional System</li> <li>G-R-E-A-T System Tension Strut Backup Wall Assembly</li> <li>G-R-E-A-T System Tension Strut Backup Wall Assembly</li> <li>G-R-E-A-T System Concrete Barrier Wall Backup Assembly</li> <li>QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes</li> <li>QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes</li> <li>QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (In</li> <li>QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)</li> <li>QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)</li> <li>QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"</li> <li>QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"</li> <li>QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2</li> <li>QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2</li> <li>QUADGUARD Energy Absorbing Sys., Nose Assembly. 24"/30"/36"</li> <li>QUADGUARD Energy Absorbing Sys., Diaphragm 24"</li> <li>QUADGUARD Energy Absorbing Sys., Diaphragm 30"</li> <li>QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3</li> <li>QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3</li> <li>QUADGUARD ELITE Fender Panel</li> <li>QUADGUARD ELITE Nose Belt Assembly</li> <li>QUADGUARD ELITE Cylinder Cartridge</li> <li>Stattist FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE</li> <li>Anchorage Assembly, Type LET</li> </ul>	2 2 2 2 2 2 2 2 2 2 2 2 2 2 1 2 1 2 4" 2 4" 2 4" 2 4" 2 4" 2 4" 2 4" 2 2 6 Damaged QU/ 1 2 2 0"/36" 2 1 1 2 2 1 1 2 2 1 1 2 2 1 2 2 2 1 2	EA           EA		1,080.00 10.80 10.80 10.80 10.80 10.80 15,120.00 1,080.00 1,080.00 108.00 1,080.00 1,080.00 1,080.00 1,080.00 1,080.00 1,080.00	\$ 1,500.00 \$ 1.00 \$ 1.00 \$ 1.00 \$ 1.00 \$ 1.00 \$ 1,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 3,000.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 5,000.00 \$ 13,500.00 \$ 5,000.00 \$ 1,500.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 3,000.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 3,000.00 \$ 3,0
<ul> <li>G-R-E-A-T System Deflector Assembly for Bidirectional System</li> <li>G-R-E-A-T System Tension Strut Backup Wall Assembly</li> <li>G-R-E-A-T System Wide Flange Backup Wall Assembly</li> <li>G-R-E-A-T System Concrete Barrier Wall Backup Assembly</li> <li>QUADGUARD Energy Absorbing Sys. (3 Bay) (All Widths) (Includes</li> <li>QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes</li> <li>QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes</li> <li>QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)</li> <li>QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)</li> <li>QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"</li> <li>QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2</li> <li>QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2</li> <li>QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"(30"/36"</li> <li>QUADGUARD Energy Absorbing Sys., Diaphragm 30"</li> <li>QUADGUARD Energy Absorbing Sys., Diaphragm 30"</li> <li>QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"(30"/36")</li> <li>QUADGUARD ELITE Fender Panel</li> <li>QUADGUARD ELITE System - Bay Replacement Parts</li> <li>QUADGUARD ELITE Nose Belt Assembly</li> <li>QUADGUARD ELITE Cylinder Cartridge</li> <li>AudAGUARD ELITE Cylinder Cartridge</li> </ul>	2           2           2           2           2           Founda           1           cludes /           2           1           2           4"           2           1           2           4"           2           1           2           2           1           2           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           NOTE 6)	EA EA EA EA EA EA EA EA EA EA EA EA EA E		10.80 10.80 10.80 10.80 10.80 15,120.00 1,080.00 1,080.00 108.00 1,080.00 1,080.00 1,080.00 1,080.00 1,080.00	\$ 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 13,500.00 \$ 1,500.00 \$ 3,000.00 \$ 1,500.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2,500.00 \$ 2,500.00
99       G-R-E-A-T System Tension Strut Backup Wall Assembly         90       G-R-E-A-T System Wide Flange Backup Wall Assembly         91       G-R-E-A-T System Concrete Barrier Wall Backup Assembly         91       G-R-E-A-T System Concrete Barrier Wall Backup Assembly         92       QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes         92       QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes         93       QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes         94       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         95       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         96       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         97       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         98       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         99       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         99       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         90       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         91       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         92       QUADGUARD ELITE System - Bay Replacement Parts         93       QUADGUARD ELITE Fender Panel         94       QUADGUARD ELITE Fender Panel <td< td=""><td>2           2           2           2           founda           1           2           1           2           4"           2           for Damaged QU/           1           2           0"/36"           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1      &lt;</td><td>EA EA EA EA EA EA EA EA EA EA EA EA EA E</td><td>\$\$         \$\$&lt;</td><td>10.80 108.00 10.80 10.80 15,120.00 1,080.00 1,080.00 108.00 1,080.00 1,080.00 1,080.00 1,080.00</td><td>\$ 1.00 \$ 1.00 \$ 1.00 \$ 1.00 \$ 13,500.00 \$ 2,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00</td><td>\$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 3.000.00 \$ 3,000.00 \$ 1,500.00 \$ 1,500.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 3,600.00 \$ 2.5600.00 \$ 1,800.00 \$ 2,500.00</td></td<>	2           2           2           2           founda           1           2           1           2           4"           2           for Damaged QU/           1           2           0"/36"           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1      <	EA EA EA EA EA EA EA EA EA EA EA EA EA E	\$\$         \$\$<	10.80 108.00 10.80 10.80 15,120.00 1,080.00 1,080.00 108.00 1,080.00 1,080.00 1,080.00 1,080.00	\$ 1.00 \$ 1.00 \$ 1.00 \$ 1.00 \$ 13,500.00 \$ 2,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 3.000.00 \$ 3,000.00 \$ 1,500.00 \$ 1,500.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 2.00 \$ 3,600.00 \$ 2.5600.00 \$ 1,800.00 \$ 2,500.00
00       G-R-E-A-T System Wide Flange Backup Wall Assembly         11       G-R-E-A-T System Concrete Barrier Wall Backup Assembly         01       G-R-E-A-T System Concrete Barrier Wall Backup Assembly         02       QUADGUARD Energy Absorbing System         02       QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes)         03       QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes)         04       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         05       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         06       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         07       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         08       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         09       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         09       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         00       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         01       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         01       QUADGUARD ELITE System - Bay Replacement Parts         02       QUADGUARD ELITE Fender Panel         03       QUADGUARD ELITE Nose Belt Assembly         04       QUADGUARD ELITE Cylinder Cartridge         05       QUADG	2           Founda         1           Cludes         2           t Parts         2           4"         2           of Damaged QU/         1           2         2           0"/36"         2           0"/36"         2           1         2           1         2           1         2           1         2           1         1           2         1           1         2           1         2           1         2           1         2           1         2           1         2           2         2           1         2           1         2           1         2           1         2           1         2           2         1           2         2	EA EA EA EA EA EA EA EA EA EA EA EA EA E	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	108.00 10.80 18,360.00 15,120.00 1,080.00 1,080.00 108.00 1,080.00 1,080.00 1,080.00 1,080.00	\$ 1.00 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.100 1.1200 1.1200 1.120	\$ 2.00 \$ 2.00 \$ 2.00 \$ 13,500.00 \$ 5,000.00 \$ 3,000.00 \$ 1,500.00 \$ 2.00 \$ 5,600.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
I       G-R-E-A-T System Concrete Barrier Wall Backup Assembly         QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes         QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes         QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes         QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes         QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)         QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)         QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         QUADGUARD ELITE Fender Panel         QUADGUARD ELITE Nose Belt Assembly         QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         Anchorage Assembly, Type LET	2           Founda         1           cludes         2           t Parts         1           2         1           4"         2           of Damaged QU/         1           2         2           0"/36"         2           0"/36"         2           1         2           2         1           2         1           2         1           2         2           1         2           0         2	EA EA EA EA EA EA ADGUARD EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	10.80 18,360.00 15,120.00 1,080.00 1,080.00 108.00 1,080.00 1,080.00 1,080.00 108.00	\$ 1.00 \$ 13,500.00 \$ 2,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,00 \$ 2,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 2.00 \$ 13,500.00 \$ 5,000.00 \$ 3,000.00 \$ 1,500.00 \$ 2.00 \$ 5,600.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
QUADGUARD Energy Absorbing System         QUADGUARD Energy Absorbing Sys., (3 Bay) (All Widths) (Includes         QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes         QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes         QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)         QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)         QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         9       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         9       QUADGUARD Energy Absorbing Sys., Diaphragm 24"         00       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         01       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         02       QUADGUARD ELITE System - Bay Replacement Parts         03       QUADGUARD ELITE Nose Belt Assembly         04       QUADGUARD ELITE Nose Belt Assembly         05       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE	Founda 1 cludes 2 t Parts 2 1 2 4" 2 of Damaged QU/ 1 2 0"/36" 2 0"/36" 2 2 0"/36" 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 2 2 1 1 2 2 1 1 2 2 2 1 1 2 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	EA EA EA EA EA EA EA EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18,360.00 15,120.00 1,080.00 1,080.00 108.00 108.00 1,080.00 1,080.00 108.00	\$ 13,500.00 \$ 2,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,00 \$ 2,800.00 \$ 1,250.00 \$ 1,250.00 \$ 650.00	\$ 13,500.00 \$ 5,000.00 \$ 3,000.00 \$ 1,500.00 \$ 2,00 \$ 5,600.00 \$ 1,800.00 \$ 1,800.00 \$ 2,500.00
22       QUADGUARD Energy Absorging Sys., (3 Bay) (All Widths) (Includes         33       QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes         34       QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Includes         35       QUADGUARD Energy Absorbing Sys., Additional Bay Replacement         36       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         36       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         37       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         37       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         38       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         39       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         30       QUADGUARD Energy Absorbing Sys., Jender Panel Assembly, 24"/30"/36"         30       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/30"/36"         30       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/30"/36"         31       QUADGUARD ELITE Fender Panel         32       QUADGUARD ELITE Fender Panel         33       QUADGUARD ELITE Nose Belt Assembly         34       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE       Anchorage Assembly, Type LET	Cludes         2           t Parts         1           2         1           2         2           of Damaged QU/         1           2         2           00'/36"         2           00'/36"         2           1         2           1         2           2         1           2         1           2         2           1         2           1         2           1         2           NOTE 6)         ************************************	EA EA EA EA EA EA EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,120.00 1,080.00 1,080.00 108.00 108.00 1,080.00 1,080.00 108.00	\$ 2,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,00 \$ 2,800.00 \$ 2,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 5,000.00 \$ 3,000.00 \$ 1,500.00 \$ 2.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
33       [QUADGUARD Energy Absorbing Sys., Additional Bay (All Widths) (Im         QUADGUARD Energy Absorbing System - Bay Replacement         44       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         55       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         66       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         77       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         77       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         78       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         79       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         90       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         90       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         91       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         92       QUADGUARD ELITE System - Bay Replacement Parts         93       QUADGUARD ELITE Fender Panel         94       QUADGUARD ELITE Nose Belt Assembly         95       QUADGUARD ELITE Cylinder Cartridge         94       QUADGUARD ELITE Cylinder Cartridge         95       QUADGUARD ELITE Cylinder Cartridge         94       QUADGUARD ELITE NONLY, DELIVERED - ITEMS 106-177 (SEE	Cludes         2           t Parts         1           2         1           2         2           of Damaged QU/         1           2         2           00'/36"         2           00'/36"         2           1         2           1         2           2         1           2         1           2         2           1         2           1         2           1         2           NOTE 6)         ************************************	EA EA EA EA EA EA EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,120.00 1,080.00 1,080.00 108.00 108.00 1,080.00 1,080.00 108.00	\$ 2,500.00 \$ 1,500.00 \$ 1,500.00 \$ 1,00 \$ 2,800.00 \$ 2,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 5,000.00 \$ 3,000.00 \$ 1,500.00 \$ 2.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
QUADGUARD Energy Absorbing System - Bay Replacement         QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         25       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)         26       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         27       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         27       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         20       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         20       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         20       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         20       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         21       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         22       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         23       QUADGUARD ELITE Fender Panel         23       QUADGUARD ELITE Fender Panel         24       QUADGUARD ELITE Nose Bet Assembly         25       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         26       Anchorage Assembly, Type LET	t Parts  2  1  2  4"  2  4"  2  5  6  7  7  7  7  7  7  7  7  7  7  7  7	EA EA EA EA EA EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,080.00 1,080.00 108.00 108.00 108.00 1,080.00 1,080.00 108.00	\$ 1,500.00 \$ 1,500.00 \$ 1.00 \$ 2,800.00 \$ 2,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 3,000.00 \$ 1,500.00 \$ 2.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
44       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)         45       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)         46       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         47       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         47       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         40       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         40       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         49       QUADGUARD Energy Absorbing Sys., Diaphragm 24"         40       QUADGUARD Energy Absorbing Sys., Diaphragm 30"         41       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         41       QUADGUARD ELITE System - Bay Replacement Parts         42       QUADGUARD ELITE Fender Panel         43       QUADGUARD ELITE Finder Panel         44       QUADGUARD ELITE Cylinder Cartridge         44       QUADGUARD ELITE Cylinder Cartridge         45       QUADGUARD ELITE Cylinder Cartridge         46       Anchorage Assembly, Type LET	2 1 2 4" 2 f Damaged QU/ 2 0"/36" 2 2 0"/36" 2 2 1 2 1 2 1 2 1 2 5 0 ******	EA EA EA EA EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$ \$	1,080.00 108.00 108.00 1,080.00 1,080.00 108.00	\$ 1,500.00 \$ 1.00 \$ 2,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 1,500.00 \$ 2.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
55       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)         66       QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"         77       QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         99       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         90       QUADGUARD Energy Absorbing Sys., Diaphragm 24"         00       QUADGUARD Energy Absorbing Sys., Diaphragm 30"         01       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/30"/36"         02       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/30"/36"         02       QUADGUARD ELITE System - Bay Replacement Parts         02       QUADGUARD ELITE Nose Belt Assembly         03       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         04       Anchorage Assembly, Type LET	2 4" 2 5 Damaged QU/ 1 2 2 0"/36" 2 2 0"/36" 2 1 2 NOTE 6) ******	EA EA ADGUARD EA EA EA EA EA EA	\$ \$ \$ \$ \$ \$ \$	1,080.00 108.00 108.00 1,080.00 1,080.00 108.00	\$ 1,500.00 \$ 1.00 \$ 2,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 1,500.00 \$ 2.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
207       [QUADGUARD Energy Absorbing Sys., Backup Assy., Tension Strut 2         QUADGUARD Energy Absorbing System - Parts for Repair of         88       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         99       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         00       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         01       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         02       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         03       QUADGUARD ELITE System - Bay Replacement Parts         04       QUADGUARD ELITE Fender Panel         03       QUADGUARD ELITE Nose Bet Assembly         04       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         06       Anchorage Assembly, Type LET	4" 2 of Damaged QU/ 1 2 0"/36" 2 2 0"/36" 2 1 2 NOTE 6)	EA ADGUARD EA EA EA EA EA EA	\$ \$ \$ \$ \$	108.00 1,080.00 1,080.00 108.00	\$ 1.00 \$ 2,800.00 \$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 2.00 \$ 5,600.00 \$ 1,800.00 \$ 2,500.00
QUADGUARD Energy Absorbing System - Parts for Repair of QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         99       QUADGUARD Energy Absorbing Sys., Diaphragm 24"         00       QUADGUARD Energy Absorbing Sys., Diaphragm 24"         01       QUADGUARD Energy Absorbing Sys., Diaphragm 30"         01       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3 QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         02       QUADGUARD ELITE System - Bay Replacement Parts         03       QUADGUARD ELITE Fender Panel         03       QUADGUARD ELITE Diaphragm Assembly         04       QUADGUARD ELITE Cylinder Catridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         06       Anchorage Assembly, Type LET	Image of Damaged QU/           1           2           0"/36"           2           0"/36"           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           1           2           NOTE 6)	ADGUARD EA EA EA EA EA EA	\$ \$ \$ \$	1,080.00 1,080.00 108.00	\$ 1,800.00 \$ 1,250.00 \$ 650.00	\$ 5,600.00 \$ 1,800.00 \$ 2,500.00
8       QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"         9       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         00       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         01       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         01       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         02       QUADGUARD ELITE System - Bay Replacement Parts         02       QUADGUARD ELITE Fender Panel         03       QUADGUARD ELITE Fender Panel         04       QUADGUARD ELITE Nose Belt Assembly         05       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         06       Anchorage Assembly, Type LET	1 2 2 0"/36" 2 2 2 2 1 2 1 2 1 2 NOTE 6) ******	EA EA EA EA EA EA	\$ \$ \$	1,080.00 108.00	\$ 1,250.00 \$ 650.00	\$ 2,500.00
99       QUADGUARD Energy Absorbing Sys., Dlaphragm 24"         00       QUADGUARD Energy Absorbing Sys., Dlaphragm 30"         01       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         01       QUADGUARD ELITE System - Bay Replacement Parts         02       QUADGUARD ELITE Fender Panel         03       QUADGUARD ELITE Fender Panel         03       QUADGUARD ELITE Nose Belt Assembly         04       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         06       Anchorage Assembly, Type LET	2 2 0"/36" 2 2 2 1 2 NOTE 6)	EA EA EA EA EA	\$ \$ \$	1,080.00 108.00	\$ 1,250.00 \$ 650.00	\$ 2,500.00
200       QUADGUARD Energy Absorbing Sys., Diaphragm 30"         201       QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         202       QUADGUARD ELITE System - Bay Replacement Parts         202       QUADGUARD ELITE Fender Panel         203       QUADGUARD ELITE Finder Panel         204       QUADGUARD ELITE Nose Belt Assembly         205       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         206       Anchorage Assembly, Type LET	2 0"/36" 2 2 2 1 2 NOTE 6)	EA EA EA EA	\$	108.00	\$ 650.00	
201       [QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 24"/3         QUADGUARD ELITE System - Bay Replacement Parts         202       QUADGUARD ELITE Fender Panel         203       QUADGUARD ELITE Diaphragm Assembly         204       QUADGUARD ELITE Nose Belt Assembly         205       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         206       [Anchorage Assembly, Type LET	0"/36" 2 2 2 1 2 NOTE 6)	EA EA EA	\$		A COLORED TO A COL	<u>\$ 1,300.00</u>
QUADGUARD ELITE System - Bay Replacement Parts         02       QUADGUARD ELITE Fender Panel         03       QUADGUARD ELITE Diaphragm Assembly         04       QUADGUARD ELITE Nose Belt Assembly         05       QUADGUARD ELITE Cylinder Cartridge         ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE         06       Anchorage Assembly, Type LET	2 2 1 2 NOTE 6) ******	EA EA	12 403	540.00		
QUADGUARD ELITE Fender Panel     QUADGUARD ELITE Diaphragm Assembly     QUADGUARD ELITE Nose Belt Assembly     QUADGUARD ELITE Cylinder Cartridge     ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE     Anchorage Assembly, Type LET	2 1 2 NOTE 6) ******	EA	6.66.541624	This Contract of Library and	\$ 1,500.00	\$ 3,000.00
QUADGUARD ELITE Nose Belt Assembly     QUADGUARD ELITE Cylinder Cartridge     ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE     Anchorage Assembly, Type LET	2 1 2 NOTE 6) ******	EA	\$	1,080.00	\$ 800.00	¢ 1 coo oo
QUADGUARD ELITE Nose Belt Assembly     QUADGUARD ELITE Cylinder Cartridge     ****** FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE     Anchorage Assembly, Type LET	1 2 NOTE 6) ******		\$	1,620.00	and the second se	\$ 1,600.00 \$ 2,200.00
FURNISH ONLY, DELIVERED - ITEMS 106-177 (SEE Anchorage Assembly, Type LET	NOTE 6) ******	EA	\$	972.00		\$ 2,200.00
06 Anchorage Assembly, Type LET		EA	15	0.16		\$ <u>6,000.00</u>
	2	and a state		0.00		<u> </u>
07 Anchorage Assembly, Type SKT 350		EA	\$	378.00		\$ 2.00
07 Anchorage Assembly, Type SKT 350 08 Type MELT Buffered End (w/Diaphragms)	2	EA	\$	1,080.00	and the second se	\$ 3,000.00
D9 Cable w/Hardware, for Type MELT	3	EA	\$	108.00	\$ 1.00	\$ 3.00
10 Type SKT 350 Extruder Head	5	EA	\$	10.80	and the second se	\$ 5.00
11 Short Post in Sleeve for TypeS SKT 350 and MELT	2 3	EA EA	\$	108.00		\$ 1,400.00
12 Block, Wood, w/Hardware	18	EA	\$	27.00 3.24		\$ 90.00
13 Block, Recycled Plastic	30	EA	\$	5.40		\$ 180.00 \$ 150.00
4 End Section, Buffer	5	EA	\$	16.20	<u>\$5.00</u> \$25.00	\$ 150.00 \$ 125.00
15 End Section, Flared	5	EA	\$	27.00	\$ 25.00	\$ 125.00 \$ 125.00
6 End Section, Parallel	5	EA	\$	25.00	\$ 25.00	\$ 125.00
I7 End Section, CRT     B End Section, Rounded	5	EA	\$	25.00	\$ 25.00	\$ 125.00
End Section, Rounded     End Shoe, Special (Bridge Attachment Piece)	2	EA	\$	32.40	\$ 25.00	\$ 50.00
20 GuardRail, Steel Beam, Straight, Incl./Hardware	5	EA	\$	1.08	\$ 6.00	\$ 30.00
21 GuardRail, Steel Beam, Shop Bent, Incl./Hardware	25		\$	4.86	\$ 6.00	\$ 150.00
22 5 Degree Radius Shop Bent GuardRail (6-1/4')	25	LF	\$	5.94	\$ 9.00	\$ 225.00
23 Transition Panel, QUAD Beam to W Beam, Narrow	25	EA	\$	1.08	\$ 8.00	\$ 200.00
24 Transition Panel, QUAD Beam to W Beam, Medium	2	EA	\$	10.80 16.20	\$ 50.00 \$ 50.00	\$ 100.00
25 Transition Panel, QUAD Beam to W Beam, Wide	2	EA	\$		\$ 50.00 \$ 50.00	\$ 100.00 \$ 100.00
6 Post, GuardRail, Steel, Standard	5	EA	\$			\$ 100.00
7 Post, GuardRail, Steel, 9'	5	EA	\$	386.64		\$ 195.00
Post, GuardRail, CRT     Post, GuardRail, Wood (Treated Timber), Standard	5	EA	\$			\$ 150.00
Post, GuardRail, Wood (Treated Timber), Standard     Post, GuardRail, Steel, Special, w/Plate	5	EA	\$	27.00	\$ 30.00	\$ 150.00
1 Safety Pipe Rail, w/Hardware	3	EA	\$	10.80		\$ 300.00
2 Safety Pipe Rail End Fixture, w/Hardware	25	LF	\$			\$ 125.00
3 Safety Pipe Rail Angle Brackets, w/Hardware	5	EA EA	\$	1.08		\$ 30.00
4 5/8" Modified Hex Nut (Recessed Nut)	25	EA	\$	2.16		\$ 300.00
5 5/8" Oval Shoulder Button Head Bolt (1-1/4")	25	EA	\$			\$ 7.50
6 5/8" Oval Shoulder Button Head Bolt (10")	10	EA	\$			\$ 7.50 \$ 15.00
7 5/8" Oval Shoulder Button Head Bolt (18")	10	EA	\$			\$ 15.00 \$ 15.00
8 5/8" Oval Shoulder Button Head Bolt (25") 9 7/8" Bridge Attachment Bolt (12")	10	EA	\$			\$ 30.00
9 7/8" Bridge Attachment Bolt (12") 0 7/8" Bridge Attachment Bolt (14")	10	EA	\$	4.32		\$ 60.00
7/8     Bridge Attachment Bolt (14")       1     7/8       7/8     Bridge Attachment Bolt (16")	10	EA	\$		\$ 9.00	\$ 90.00
2 7/8" Bridge Attachment Bolt (18")	8	EA	\$			\$ 72.00
3 7/8" Bridge Attachment Bolt (20")	10	EA EA	\$	8.64		\$ 90.00
4 7/8" Bridge Attachment Bolt (22")	5	EA EA	\$			\$ 50.00
5 7/8" Bridge Attachment Bolt (24")	5	EA	\$	and the second se		\$ 50.00 \$ 60.00
6 7/8" Bridge Attachment Nut	5	EA	\$			\$60.00 \$60.00
7 7/8" Bridge Attachment Washer	5	EA	\$	the second s		\$ <u>60.00</u> \$60.00
8 7/8" Bridge Attachment BackinG Plate	5	EA	\$		-	\$ 60.00 \$ 60.00
THRIE Beam 9 Rail Splice, THRIE-Beam	Tana Manazari Saka Tana Saka Carendari	n el produjuda de la	$q = \frac{1}{2} \frac{1}{2} \frac{1}{2}$		Place April Chronic Parts	
0 THRIE Beam Terminal Connector	5	EA	\$		\$ 10.00	\$ 50.00
1 THRIE Beam Bridge Connector Complete (Detail J)	3	EA	\$		\$ 10.00	
2 12" x 12" x 1/4" Back Up Plate	2	EA	\$		-	\$ 2,900.00
3 8" x 8" x 5/8" Filler Plate - Installed Complete	5	EA EA	\$			\$ 100.00
4 21" x 21" x 5/8" BACK Up Plate - Installed Complete	5	EA	\$		\$ 50.00 \$ 50.00	
5 THRIE Beam, Straight Panel Complete (w/ Post, Block & Hardware)	25		\$		\$50.00 \$16.00	
6 [THRIE Beam, Shop Bent Panel Complete (w/ Post, Block & Hardware)	25	LF	\$		\$ 30.00	
7 THRIE Beam, Straight Panel (Panel Only) 3 THRIE Beam, Shop Bent Panel (Panel Only)	25	LF	\$		\$ 8.00	and the second se
	25	LF	\$		\$ 8.00	
9 6'-3" Transition Panel THRIE Beam to W-Beam 0 THRIE Beam Offset Block	1	EA	\$		\$ 100.00	
QUADGUARD Energy Absorbing System	5	EA	\$		\$ 8.00	
QUADGUARD Energy Absorbing System - QUADGUARD Energy Absorbing System - Bay Replacement I	Dawe -		127	ether a starter t	and the sheet to	
QUADGUARD Energy Absorbing System - Bay Replacement       QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type I)	the second s	arrite Harris				
2 QUADGUARD Energy Absorbing Sys., Additional Cartridges (Type II)	2	EA	\$		\$ 725.00	
3 QUADGUARD Energy Absorbing Sys., Backup Assy., Concrete 24"	2	EA EA	\$		\$ 725.00 S	
QUADGUARD Energy Absorbing Sys., Backup Assy Tension Strut 24	2	EA	\$		\$ 1,500.00 \$ \$ 2,800.00 \$	
5 QUADGUARD Energy Absorbing Sys., Nose Assembly, 24"/30"/36"	2	EA	\$		\$ 2,800.00 3 \$ 600.00 3	and the second se

N:\ROADWAY\PRO\2017\2017052 - Annual Guardrail\3\_Award Spec Forms\1\_Bid Tabulations\Bid Tabs\_SOUTHEAST.xisx

2 of 4

#### ATTACHMENT 4 PAGE 3 OF 4

Sec. Contractor	BID PROPOSAL ANNUAL GUARDRAIL CONTRACT PBC PROJECT #2017052			States in	NGINEER S STIMATE	Gu	Southeas ardrail & At		
ITEM #		QTY	UNITS	lΓυ	NIT PRICE	U	NIT PRICE		TOTAL
166	QUADGUARD Energy Absorbing Sys., Dlaphragm 24"	2	EA	\$	810.00	\$	1,000.00	\$	2,000.00
167	QUADGUARD Energy Absorbing Sys., Dlaphragm 30"	2	EA	\$	864.00	Š	1.000.00	Š	2,000.00
168	QUADGUARD Energy Absorbing Sys., Dlaphragm, 69"/90" (20 Sizes)	2	EA	Ś	864.00	ŝ	2.000.00	\$	4,000.00
169	QUADGUARD Energy Absorbing Sys., Fender Panel Assembly, 69"/90"	2	EA	Ś	108.00	\$	900.00	\$	1,800.00
	QUADGUARD ELITE System	na la consella				Ψ	500.00	Ψ 8354	1,000.00
<u>n - 15</u>	QUADGUARD ELITE System - Bay Replacement Parts	NYELCHED.	frank Tolska gelan	1.000		的時間	Goldsberg (sone for	MARS.	nia manana di sayan Kendaa sekera di penah
	QUADGUARD ELITE Fender Panel	2	EA	\$	432.00	\$	700.00	\$	1,400.00
	QUADGUARD ELITE Diaphragm Assembly	2	EA	\$	432.00	\$	2.100.00	\$	4,200.00
	QUADGUARD ELITE Nose Belt Assembly	2	EA	<u>\$</u>	486.00	\$	3,500.00	\$	7.000.00
173	QUADGUARD ELITE Cylinder Cartridge	2	EA	Ś	540.00	\$	3,300.00	\$	6.600.00
	QUADGUARD ELITE System - Furnish and Install, Complete (See	Note 5)	del 189 av 1898	10.55		5.292	0,000.00	<b>Ψ</b>	0,000.00
174	QUADGUARD ELITE System (7 Bay) - 69" Wide Incl./All Hardware		EA	\$	33,480.00	\$	21,000.00	\$	21,000.00
175	QUADGUARD ELITE System (7 Bay) - 90" Wide Incl./All Hardware	1	EA	1 Š	35,640.00	\$	21,000.00	\$	21,000.00
176	QUADGUARD ELITE System (11 Bay) - 69" Wide Incl./All Hardware	1	EA	\$	43,200.00	\$	32,300.00	\$	32,300.00
177	QUADGUARD ELITE System (11 Bay) - 90" Wide Incl./All Hardware	1	EA	1 \$	33,480.00	\$	32,000.00	ŝ	32,000.00
		2019-6366			TO	AL I	BID AMOUNT	\$	568,709.25

	ANNUAL GUARDRAIL CONTRACT ANNUAL GUARDRAIL CONTRACT PALM BEACH COUNTY PROJECT #2017052
HE COUNT	TY DOES NOT GUARANTEE THE ACCURACY OF THE FORMULAS AND EXTENSIONS USED IN THIS SPREADSHEET.
HE ITEM	S AND QUANTITIES SHOWN, SHALL GOVERN OVER THE PLANS.
PAY ITEM	FOOTNOTES IN CONSTRUCTION PLANS SHALL ALSO BE INCLUDED IN ITEM UNIT PRICE.
a ve a trabelhe at t	FOOTNOTES:
II costs fo	r Maintenance of Traffic (MOT) and mobilizatioin shall be considered incidental to, and shall be included in, unit prices for the pay items.
IOTES:	
	Items 4 Through 8, Removal and Disposal or Delivery of GuardRail items, - Disposition of All materials in the field shall be at the discretion of the Road and Bridge Division or other Palm Beach County representative on-site.
	Item 12, Surcharge to Reset GuardRail Post on Base Plate - This item is considered an add-on to the per linear foot price for Item 10 - Reset GuardRail and shall constitue all Additional labor and materials for each post removed and Reset on a surFace-mounted base plate.
	Item 13, Raise and Reset Existinging GuardRail (Posts and Panels) shsll Include All labor, equipment an materials to vertically raise and Reset existing guradRail sections to proper height as directed by Palm Beach County.
4.	Item 65, Round-Off Top of Wooden GuardRail Post and Block (All Sides) shall Include All labor, router equipment and materials to produce a routed, 3/4" round over on All top edges and corners of Wooden Posts and Blocks adjacent to, and/or within 2' of, pedestrian sidewalks and pathways.
5.	Items 15 Through 105 and 174 Through 177, Furnish and Install, Complete shall mean Complete installation under any field conditions (in Concrete, asphalt, etc.).
	Items 106 Through 173, Furnish Only, Delivered Shall Include All Hardware, etc. required for Completed installation of the component Parts by the Road and Bridge Division or other Palm Beach County personnel.
Vorkina d	lays to complete project: (See Special Provisions).
-	ad at opening on Tuesday, December 20, 2016; 2:00 PM
	bject to OSBA SBE compliance and Board Approval.
repared	by: Geraldine Lazzarino-Kelly, Technical Assistant I
hecked b	y: Holly B. Knight, P.E., Contracts Section Manager